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University of Southampton, Highfield, Southampton SO17
1BJ (GB).

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(74) Agent: MCGOWAN, Cathrine; D Young & Co, 120 Hol-
born, London EC1N 2DY (GB).

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(71) Applicant (for all designated States except US): UNI-
VERSITY OF SOUTHAMPTON [GB/GB]; Highfield,
Southampton SO17 1BJ (GB).

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(72) Inventors; and

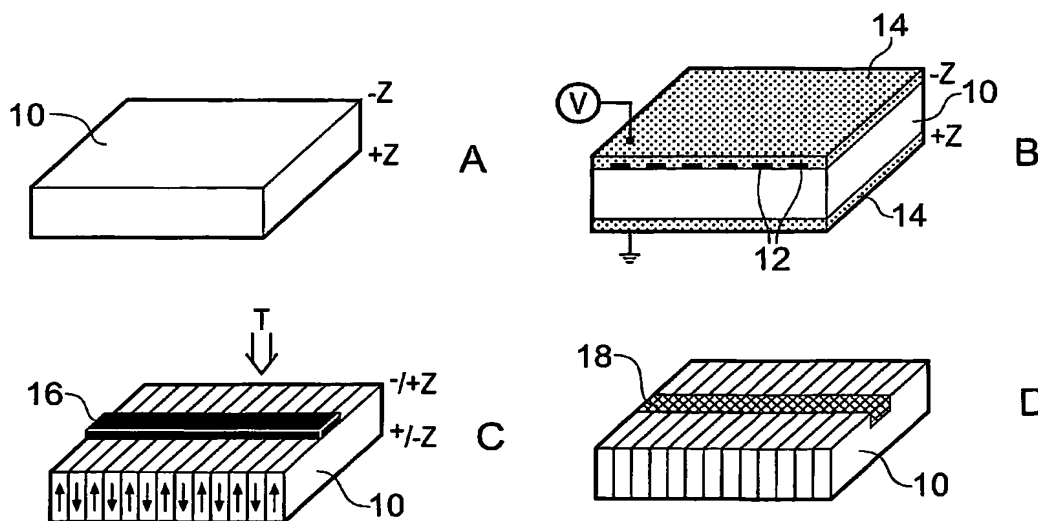
(75) Inventors/Applicants (for US only): SMITH, Peter,
George, Robin [GB/GB]; Centre for Enterprise & Innova-
tion, University of Southampton, Highfield, Southampton
SO17 1BJ (GB). GAWITH, Corin, Barry, Edmund
[GB/GB]; Centre for Enterprise & Innovation, University
of Southampton, Highfield, Southampton SO17 1BJ (GB).
MING, Lu [CN/GB]; Centre for Enterprise & Innovation,

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(54) Title: FABRICATION OF OPTICAL WAVEGUIDES IN PERIODICALLY POLED LITHIUM NIOBATE



(57) Abstract: A method of fabricating an optical waveguide (18) comprises providing a sample of lithium niobate (10) that has one or more periodically poled gratings made by electric field poling, applying a patterned surface layer of metallic zinc (16) to a z-face of the sample so that the layer (16) has a pattern corresponding to an intended pattern of waveguides (18) to be written into the lithium niobate, and heating the sample to diffuse the metallic zinc (16) into the lithium niobate so as to form an optical waveguiding structure (18) within the sample.



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